

A Note on Bayes Estimates of Multinomial Probabilities under Step-Wise Sampling

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Abstract

Lee and Park (1999) had shown that in a multinomial scheme with step-wise sampling, maximum likelihood estimates of multinomial probabilities are improved when some frequencies are merged. In general, when Bayes estimates are applied with conjugate priors we expect the estimates to improve the variance of the multinomial probabilities. In this study sensitivity is checked as the prior information varies. The results are compared using MSE statistics.

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